

Viral Hemorrhagic Fevers

Dr. Joanne Cono, CDC

Ebola. It strikes fear in the hearts of people who hear the word. Movies have been made about the dreadful outcome of becoming infected with Ebola. But Ebola is just one of several deadly diseases.

There are many types of viruses in the world, some more deadly than others. Some viruses cause mild colds while other viruses cause severe illness and death. The ones of greatest concern are the viruses that cause hemorrhagic fevers. The viral "hemorrhagic" fevers are called this because they cause internal and external bleeding in people who get infected.

The hemorrhagic fever viruses are found within 4 families of viruses. Each of these 4 families of viruses contains several types of viruses. They include Ebola, Marburg, Lassa fever, yellow fever and a few others.

Dr. Michael Bell, CDC

None of the viral hemorrhagic viruses occur naturally in the United States. Although with travel becoming easier and more common, an outbreak of these viruses is a growing possibility. A number of years ago, we investigated an outbreak of a mysterious virus that had never been found in this country. It was found to be hantavirus and it was spread by a certain type of mouse. The way that hemorrhagic fever viruses spread varies

according to the type of virus. You can get some of these viruses by being in close contact with people or animals that may be infected or by being bitten by a blood-sucking insect that are infected. There are no known cures for any of the diseases caused by these viruses. Patients should be cared for using appropriate infection control precautions and should receive supportive care.

Cono

Some of these viruses may have been around for a long time. One third of Athenians lost their lives to a mysterious plague in 431 BC. Some historians believe that Ebola may have been the disease that was described as the cause of all these deaths during war in ancient Greece.

Hemorrhagic fever viruses are worrisome as possible biological weapons because they spread so easily. Infection can be transmitted by direct contact with infectious body fluids or by infectious droplets that reach the mucous membranes. Ebola has caused devastating outbreaks in several parts of Africa, killing entire families as well as nurses and doctors in hospitals. A recent outbreak in the Republic of Congo caused hundreds of deaths and disrupted travel and commerce in large parts of the country.

Bell

Other hemorrhagic fever viruses, including Lass fever virus, Rift

Valley fever virus, and Congo-Crimean hemorrhagic fever virus, have caused large outbreaks, leading to death in humans and, in some cases, livestock. One virus, a close relative of Ebola virus known as Marburg virus, is already known to have been developed as a weapon.

A terrorist attack using any of these viruses in a populated area could result in mass illness and many deaths.

Cono

The Centers for Disease Control and Prevention and other agencies are staying alert to the possibility of attacks using these hemorrhagic fever viruses. Our partnership with health departments and physicians is critical to quickly identifying even a single case of one of these diseases in the U.S.. We continue to be prepared to deal with the possibility of a large outbreak, but it's always best to contain an outbreak quickly before it grows out of control.